COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 7.00 AIR POLLUTION CONTROL REGULATIONS

310 CMR 7.24 U ORGANIC MATERIAL STORAGE AND DISTRIBUTION

- (1) <u>Organic Material Storage Tanks</u>. No person who owns, leases, operates or controls a storage tank with a capacity equal to or greater than 40,000 gallons, into which organic material having a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions, is placed, stored, or held shall store, hold or otherwise transfer the organic material in the storage tank unless:
 - (a) each tank is equipped with a submerged fill pipe; and,
 - (b) each tank not equipped with an external floating roof (see 310 CMR 7.24(1)(c)) is equipped with one of the following control devices:
 - 1. a pressure tank system which maintains pressure at all times so as to prevent organic material loss to the atmosphere; or,
 - 2. a vapor recovery system which collects all of the organic vapors emitted from the tank, and a vapor control system which reduces emissions of vapors to the atmosphere by at least 95% over every three hour period; or
 - 3. if the tank does not store organic material with a true vapor pressure greater than 11.0 psia under actual storage conditions, then a fixed roof and a floating roof consisting of a pontoon, double deck, or internal floating roof which rests on the surface of the liquid contents and is equipped with a closure seal, or seals, to close the space between the roof edge and tank wall, and tank gauging and sampling devices which are gas tight except when in use; or,
 - 4. any other equipment equal to or greater in efficiency than listed in 310 CMR 7.24(1)(b)2. and approved by the Department and EPA; and
 - (c) on or after November 1, 1984, each external floating roof tank is equipped with an external floating roof of a pontoon, double deck, or external floating cover design, which rests on the surface of the liquid contents; and is fitted with a primary seal and a continuous secondary seal which seals the space between the

edge of the floating roof and the tank wall; and stores organic material which has a vapor pressure less than 11.0 pounds per square inch absolute under actual storage conditions; and all tank gauging or sampling devices are gas tight except when in use; and,

- (d) each of the seal(s) required by 310 CMR 7.24(1)(b)3 and 310 CMR 7.24(1)(c) meet the following requirements, where applicable:
 - 1. there are no visible holes, tears, or other openings in the seal(s) or seal fabric; and,
 - 2. the seal(s) is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and,
 - 3. for vapor mounted primary seals, the accumulated area of gaps between the secondary seal and the tank wall which exceed 0.32 cm (1/8 in.) in width do not exceed 21.2 cm per meter of tank diameter (1.0 in per ft of tank diameter), as determined by 310 CMR 7.24(1)(k); and,
 - 4. measurement of the gap in the secondary seal is made annually, and such measurement complies with 310 CMR 7.24(1)(d)3; and,
 - 5. a visual inspection of the secondary closure seal is conducted semiannually; and,
 - 6. an inspection of internal floating roofs is conducted through the roof hatches monthly; and,
 - 7. an inspection of cover and seal for internal floating roofs is conducted whenever the tank is emptied for nonoperational reasons or once per year, whichever is sooner; and,
- (e) all openings in a floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
 - 1. equipped with covers, seals, or lids which are kept closed except when the openings are in actual use; and,
 - 2. equipped with projections into tank which remain below-the-liquid surface at all times; and
- (f) automatic bleeder vents are kept closed except when the roof is being floated off of, or being landed on, the roof leg supports; and,

- (g) rim vents are set to open when the roof is being floated off the leg supports, or at the manufacture recommended setting; and,
- (h) emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90% of the area of the opening; and,
- (i) <u>Recordkeeping and Reporting</u>. for any tank with a capacity of 40,000 gallons or more which contains an organic liquid with a true vapor pressure greater than 1.5 psia, records are prepared, maintained and kept onsite for a minimum of two years: of the average monthly storage temperature: of the true vapor pressure, monthly throughput and type of organic material stored; of any inspections or tests conducted under 310 CMR 7.24(1)(d)4 through 7; of any transfers made; and of any maintenance of the vapor processing system; and,
- (j) for any tank with a capacity in excess of 40,000 gallons which is equipped with an external floating roof and which contains any organic material with a vapor pressure greater than 1.0 psia but less than 1.5 psia under actual storage conditions, records are maintained and kept for a minimum of two years; of the average monthly storage temperature and the type of liquid stored and its vapor pressure; and
- (k) the total area of gaps under 310 CMR 7.24(1)(d)3 is determined by physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 1/8 in. uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and the tank wall, and summing the area of the individual gaps: any person who proposes to conduct this test shall notify the Department at least 30 days before the test so the Department may, at its option, observe the test.
- (1) 310 CMR 7.24(1)(a) through 310 CMR 7.24(1)(k) do not apply to petroleum liquid storage tanks which are used to store waxy, heavy pour crude oil, or which have a capacity less than 416,000 gallons and are used to store produced crude oil and condensate prior to lease custody transfer.

(2) Bulk Terminals and Bulk Plants.

(a) U Bulk Terminals No person who owns, leases, operates or controls a bulk terminal shall cause, suffer, allow or permit the transfer into a tank truck, trailer or other contrivance of any organic material with a vapor pressure of 1.5 psia or greater under actual storage conditions unless:

- 1. each loading rack at the bulk terminal is equipped with a vapor collection and disposal system, which has been installed and is maintained and operated in accordance with the operating instructions of the manufacturer; and,
- 2. any vapor discharged during transfer of the organic material is collected and disposed of by the vapor collection and disposal system; and,
- 3. the amount of organic material released to the ambient air is less than 80 milligrams per liter of liquid loaded or unloaded over a six hour period, as determined by the reference method and test procedures found in Title 40 CFR 60.503(c) and 60.503(d); and,
- 4. any transfer of organic material takes place through a submerged fill pipe; and,
- 5. each loading rack at the bulk terminal is equipped with a loading arm which has a vapor collection adaptor designed, maintained and operated to force a vapor-tight seal between the adaptor and hatch; and,
- 6. each loading rack at the bulk terminal has a means to:
 - a. prevent any remaining liquid organic material from draining when the loading rack is disconnected from the hatch of any tank truck, trailer or other contrivances: or,
 - b. accomplish complete drainage of any remaining organic material before the loading rack is disconnected from the hatch of any tank truck, trailer or other contrivance; or,
 - c. if loading is effected through means other than a hatch, then all loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.
- (b) <u>CM, MB, MV, PV, SM</u>. Bulk Plants On or after July 1, 1980 no person who owns, leases, operates or controls a bulk plant shall cause, suffer, allow or permit the transfer into any tank truck, trailer or other contrivance of any organic material with a vapor pressure of 1.5 psia or greater under actual storage conditions unless:
 - 1. the transfer of the organic material takes place through a submerged fill pipe; and,

- 2. any vapor discharged during transfer of the organic material is processed by vapor balance system.
- (c) <u>B, Dukes County, Nantucket County. Bulk Plants</u>. On or after April 1, 1993 no person who owns, leases, operates or controls a bulk plant shall cause, suffer, allow or permit the transfer into a tank truck, trailer or other contrivance of any organic material with a vapor pressure of 1.5 ps ia or greater under actual storage conditions unless:
 - 1. the transfer of the organic material takes place through a submerged fill pipe; and,
 - 2. any vapor discharged during transfer of the organic material is processed by a vapor balance system.
- (d) Any person who owns, leases, operates or controls a facility which is or becomes subject to 310 CMR 7.24(2)(a) through (c), shall only transfer organic material with a vapor pressure of 1.5 psia or greater under actual storage condition into tank trucks which are in compliance with 310 CMR 7.24(4).
- (e) Any person who owns, leases, operates or controls a facility which is or becomes subject to 310 CMR 7.24(2)(a), (b) or (c), shall continue to comply with all requirement of 310 CMR 7.24(2)(a), (b) or (c), respectively, even if the facility no longer meets the applicability requirements of 310 CMR 7.24(2)(a), (b) or (c).
- (f) 310 CMR 7.24(2) shall not apply to dispensing of motor vehicle fuel to motor vehicle fuel tanks.

Note: LEGEND – The following symbols will indicate, in the attached 310 CMR 7.00: Air Pollution Control, which Air Pollution Control Districts they apply to:

U = Universal, all districts

MB = Metropolitan Boston

B = Berkshire

PV = Pioneer Valley

CM = Central Massachusetts

SM = Southeastern Massachusetts

MV = Merrimack Valley

(3) Distribution of Motor Vehicle Fuel.

- (a) No person who owns, leases, operates or controls a storage tank having a capacity greater than 250 gallons but less than 40,000 gallons shall cause, suffer, allow or permit the transfer of motor vehicle fuel with a true vapor pressure greater than 1.5 psia or greater under actual storage conditions into said facility from any delivery vessel unless the transfer takes place through submerged filling.
- (b) <u>CM, MB, MV, PV, SM.</u> On or after July 1, 1980, no person shall cause, suffer, allow or permit the transfer of motor vehicle fuel with a true vapor pressure of 1.5 psia or greater under actual storage conditions to a motor vehicle fuel dispensing facility with a stationary tank having a capacity equal to or greater than 2000 gallons from any delivery vessel unless the vapors displaced from the stationary tank during submerged filling are processed by a vapor balance system.
- (c) <u>B</u>. On or after April 1, 1993, no person shall cause, suffer, allow or permit the transfer of motor vehicle fuel with a true vapor pressure of 1.5 psia or greater under actual storage conditions to a motor vehicle fuel dispensing facility with a stationary tank having a capacity equal to or greater than 2000 gallons from any delivery vessel unless the vapors displaced from the tank during submerged filling are processed by a vapor balance system.
- (d) <u>U</u>. On or after July 1, 1991, no person shall cause, suffer, allow or permit the transfer of motor vehicle fuel with a true vapor pressure of 1.5 psia or greater under actual storage conditions to a motor vehicle fuel dispensing facility with a stationary tank having a capacity greater than 250 gallons installed after July 1, 1991 from any delivery vessel unless the vapors displaced from the tank during submerged filling are processed by a vapor balance system.
- (e) <u>U</u>. Any person who owns, operates, leases, or controls a vapor-laden delivery vessel shall:
 - 1. maintain and operate the vapor-laden delivery vessel such that it is vapor tight at all times, and
 - 2. re-fill the vapor-laden delivery vessel only at bulk gasoline terminals and plants which are in compliance with 310 CMR 7.24(2), and
 - 3. keep hatches on the vessel closed at all times during loading and unloading.
- (f) Any person subject to 310 CMR 7.24(3)(b), (c) or (d) shall:
 - 1. install, maintain and properly operate the vapor balance system; and,

- 2. maintain records of all maintenance performed, including the type of maintenance performed and date the maintenance was performed; and,
- 3. maintain records of all malfunctions, including the type of malfunction, the date the malfunction was observed, and the date the malfunction was repaired; and,
- 4. maintain all gauges, meters, or other specified testing device in proper working order; and
- 5. maintain records of the daily throughput of any organic material with a true vapor pressure of 1.5 psia or greater under actual storage conditions.
- (g) The provisions of 310 CMR 7.24(3) shall not apply to:
 - 1. stationary gasoline storage tanks of less than 550 gallons capacity used exclusively for the fueling of implements of husbandry, provided the container are equipped with submerged fill pipes; and,
 - 2. transfers made to storage tanks of motor vehicle fuel dispensing facilities equipped with floating roofs which have been approved by the Department.
- (h) The provisions and requirements of 310 CMR 7.24(3) are subject to the enforcement provisions specified in 310 CMR 7.52.

Note: LEGEND – The following symbols will indicate, in the attached 310 CMR 7.00: Air Pollution Control, which Air Pollution Control Districts they apply to:

U = Universal, all districts

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(4) Motor Vehicle Fuel Tank Trucks.

(a) On and after July 1, 1985, no person owning, leasing operating or controlling a tank truck that carries motor vehicle fuel with a true vapor pressure equal to or

greater than 1.5 psia under actual storage conditions and receives fuel from or delivers fuel to a facility subject to 310 CMR 7.24(2), or delivers fuel to a facility subject to the requirements of 310 CMR 7.24(2) or (3) shall cause, suffer, allow or permit the tank truck to be loaded or unloaded unless the tank truck:

- 1. is tested annually during the months of January through June; and,
- 2. sustains a pressure change of no more than three in. of H_2O in five minutes when pressurized to a gauge pressure of 18 in. of H_2O or when evacuated to a gauge pressure of six in. of H_2O during the testing; and,
- 3. is repaired and retested within 15 days of testing if it does not meet the criteria of 310 CMR 7.24(4)(a)2; and,
- 4. displays a marking in two inch high letter near the Department of Transportation Certification plate required by 49 CFR 178.340-10b, which
 - a. shows the initials "DEP" and the date the tank truck last passed the test ("DEP date"); and
 - b. shall expire July 1 of the year following the test.
- (b) The owner or operator of a bulk terminal, bulk plant, motor vehicle fuel dispensing facility or tank truck subject to 310 CMR 7.24(2), 7.24(3), or 7.24(4)(a) shall design, install and operate any vapor collection and disposal system, vapor balance system, and any appurtenant loading equipment in a vaportight manner that prevents:
 - 1. gauge pressure from exceeding 18 in. of H₂O and vacuum from exceeding six in. of H₂O in the tank truck; and,
 - 2. a reading equal to or greater than 100% of the lower explosive limit (LEL, measured as propane) at one inch from all points of the perimeter of a potential leak source during transfer operations at the loading rack or stationary tank; and,
 - 3. visible liquid leaks during loading at the loading rack or unloading at the stationary tank.
- (c) The owner or operator of a tank truck subject to 310 CMR 7.24(4) shall:
 - 1. notify the Department in writing of the date and location of a certification test at least two days before the anticipated test date; and

- 2. Within 15 days, repair and retest a vapor recovery system or tank truck that exceeds the limits in 310 CMR 7.24(4)(a) or (b).
- (d) The Department may, at any time, test any tank truck, or vapor recovery system to determine compliance with the requirements of 310 CMR 7.24(4)(a) or (b).
- (e) The Department may, upon written notice modify the testing frequency of 310 CMR 7.24(4)(a).
- (f) The owner or operator of a tank truck subject to 310 CMR 7.24(4)(a) shall maintain records of all certification testing and repairs for at least two years.
- (g) Copies of all records and reports required under this section shall immediately be made available to the Department upon verbal or written request, at any reasonable time.
- (h) At the discretion of the Department, the requirements for testing and marking motor vehicle fuel tank trucks subject to 310 CMR 7.24(4) may be satisfied if the vehicle undergoes equivalent certification in another state.
- (i) The owner or operator of a tank truck subject to 310 CMR 7.24(4)(a) shall maintain records of the daily throughput of any organic material with a true vapor pressure of 1.5 psia or greater under actual storage conditions.
- (5) Gasoline Reid Vapor Pressure.
 - (a) * * *
 - (b) * * *
 - 1. ***
 - 2. Any fuel sampling and testing required by the Department shall be conducted in accordance with ASTM Method D4177, ASTM Method D4057, ASTM Method D323 or any other method approved by the Department and EPA.
- (6) <u>U Dispensing of Motor Vehicle Fuel.</u>
 - (a) Applicability and Installation Requirements.

- 1. Any person who owns, leases, operates or controls a motor vehicle fuel dispensing facility constructed or substantially modified after November 1, 1989 shall install, prior to commencing operation, a Stage II system in accordance with the terms and conditions of the system's currently applicable Executive Order.
- 2. Any person who owns, leases, operates or controls a motor vehicle fuel dispensing facility constructed before November 1, 1989, that has not been substantially modified since November 1, 1989 shall install a Stage II system in accordance with the terms and conditions of the system's currently applicable Executive Order, in accordance with the following schedule:
 - a. by April 1, 1991 where the annual (calendar year) throughput of the motor vehicle fuel dispensing facility is greater than or equal to 1,000,000 gallons of motor vehicle fuel; or
 - b. by April 1, 1992 where the annual (calendar year) throughput of the motor vehicle fuel dispensing facility is less than 1,000,000 gallons but greater than or equal to 500,000 gallons of motor vehicle fuel; or
 - c. by April 1, 1993 where the annual (calendar year) throughput of the motor vehicle fuel dispensing facility is less than 500,000 gallons per year but is greater than or equal to 20,000 gallons in any one calendar month; or
 - d. by April 1, 1994, or 90 days after dispensing 10,000 gallons or more in any calendar month, whichever is later, for all other motor vehicle fuel dispensing facilities.
- 3. Any person who owns, leases, operates or controls a motor vehicle fuel dispensing facility constructed before November 1, 1989, which has not been substantially modified since November 1, 1989 and which has not dispensed greater than 10,000 gallons of motor vehicle fuel in any one calendar month since January 1, 1988 shall maintain, on site at the facility, monthly records of the total number of gallons of motor vehicle fuel dispensed at said facility for the most recent rolling five year period.
- 4. Any person who owns, leases, operates or controls a tank truck engaged in the direct dispensing of motor vehicle fuel to a motor vehicle or portable container shall install, by September 1, 1995 or prior to commencing operation, whichever is later, a Stage II system that meets the

terms and conditions of the system's currently applicable Executive Order. Tank trucks dispensing motor vehicle fuel to emergency motor vehicles or portable containers during fire fighting activities or a declared emergency situation are exempt from the requirements of 310 CMR 7.24(6).

- 5. Any person subject to 310 CMR 7.24(6) shall conspicuously post Stage II system operating instructions on both sides of all motor vehicle fuel dispensers or at a position adjacent to the dispensers which is clearly visible to the system operator during the refueling process. Such instructions shall include:
 - a. a clear pictorial or written description of how to correctly dispense motor vehicle fuel using the installed Stage II system;
 - b. a warning not to continue dispensing motor vehicle fuel ("topping-off") after automatic system shutoff has engaged; and
 - c. the telephone number of the Department's Stage II Consumer Hotline.
- 6. Stationary motor vehicle fuel storage tanks of less than 550 gallons capacity used exclusively for the fueling of implements of husbandry, provided the fuel storage tanks are equipped with submerged fill pipes, are exempt from the requirements of 310 CMR 7.24(6).
- (b) Operation and Maintenance Requirements.
 - 1. Any person subject to 310 CMR 7.24(6) shall comply with the following operation and maintenance requirements.
 - a. Operate and maintain the installed Stage II system in accordance with the terms and conditions of the system's currently applicable Executive Order.
 - b. Take such actions as necessary to comply with the applicable terms and conditions of any new or modified Executive Order upon Department revision of 310 CMR 7.24(6) to incorporate such new or modified Executive Order. Such actions shall be taken either:
 - i. during applicable routine maintenance;
 - ii. upon substantial modification of the Stage II system; or

- iii. within four years, whichever occurs first.
- c. Perform a weekly visual inspection of the Stage II system components to determine if such components are installed, functioning and unbroken in accordance with the terms and conditions of the system's currently applicable Executive Order. Each visual inspection shall include, but not be limited to, inspection of: nozzle boots and splash/vapor guards; hoses; hose retractors, coaxial adaptors, dry breaks, fill caps and gaskets, vapor recovery caps and gaskets, spill containment boxes and drain valves.
- d. Upon determining that a Stage II system component is incorrectly installed, nonfunctioning or broken, immediately remove said component from service, conspicuously post "Out of Order" signs on said component, and, within 14 days, re-install, repair or replace the component in accordance with the terms and conditions of the system's currently applicable Executive Order.
- 2. A visual inspection of a Stage II system to meet the requirements of 310 CMR 7.24(6)(b)1.c. may be performed only by a person who is trained to operate and maintain the Stage II system in accordance with the terms and conditions of the system's currently applicable Executive Order. Each person subject to 310 CMR 7.24(6) shall maintain a current record of all persons trained as per 310 CMR 7.24(6)(b)2. Such record shall be maintained on site or, for tank trucks, at the address from which the tank truck is principally operated, and shall include the following:
 - a. the date training was last received; ii. the trainee's printed name; and
 - b. the personal signature of the trainee acknowledging receipt of the training.
- 3. Any person subject to 310 CMR 7.24(6) shall maintain all Stage II system maintenance records on site for the most recent rolling 12 month period. Such maintenance records for tank trucks shall be maintained at the address from which the tank truck is principally operated.
 - a. Stage II system maintenance records shall be maintained in a log and shall include the following:
 - i. the date of actual performance of each visual inspection;

- ii. an itemization of all Stage II system components reinstalled, repaired or replaced;
- iii. the signature of the person who performed each visual inspection;
- iv. the date and first result of each in-use compliance test, performed pursuant to 310 CMR 7.24(6)(c)2., 3. and 4. as applicable; and
- v. the date each in-use compliance test, performed pursuant to 310 CMR 7.24(6)(c)2., 3. and 4. as applicable, was performed and passed.
- 4. All records maintained pursuant to 310 CMR 7.24(6)(b) shall be made available to the Department or the US EPA immediately upon the request of either. In the event requested records cannot be made immediately available, requested records shall be delivered to the Department or the US EPA, as applicable, within 24 hours of the initial request.

(c) Compliance Testing and Certification Requirements.

- 1. <u>Installation Compliance Certification</u>. Any person subject to 310 CMR 7.24(6) who installs or makes a substantial modification to a Stage II system after January 1, 2001, prior to commencing operation, shall perform and pass installation compliance tests pursuant to 310 CMR 7.24(6)(c)1.b. and submit to the Department a fully completed and signed Installation Compliance Certification, on a form obtained from the Department, attesting to the following:
 - a. the installed or substantially modified Stage II system is installed or substantially modified in compliance with 310 CMR 7.24(6)(a);
 - b. the following installation compliance tests, as applicable, were performed in accordance with 310 CMR 7.24(6)(c)6.:
 - i. Vapor balance systems: Pressure Decay Test and Dynamic Pressure/Liquid Blockage Test;
 - ii. Vacuum assist systems: Pressure Decay Test, Air-to-Liquid Ratio Test and Dynamic Pressure/Liquid Blockage Test; or

- iii. Alternative installation compliance tests that both are specified in the terms and conditions of the installed system's currently applicable Executive Order and are approved by the Department in program guidance issued prior to performance of the alternative tests; and
- c. the applicable installation compliance tests were performed and were passed not more than 30 days prior to the date postmarked on the envelope used to submit the certification to the Department.
- 2. Vacuum Assist 120 Day In-Use Compliance Certification. Any person subject to 310 CMR 7.24(6) who installs or makes a substantial modification to a vacuum assist Stage II system after January 1, 2001 shall perform in-use compliance tests pursuant to 310 CMR 7.24(6)(c)2.b. and shall submit to the Department, not more than 120 days after the date postmarked on the envelope used to submit to the Department the certification required by 310 CMR 7.24(6)(c)1 or the date the facility commenced operation, whichever occurs first, a fully completed and signed In-Use Compliance Certification, on a form obtained from the Department, attesting to the following:
 - a. the installed vacuum assist Stage II system is operated and maintained in accordance with 310 CMR 7.24(6)(b);
 - b. the following in-use compliance tests were performed in accordance with 310 CMR 7.24(6)(c)6.:
 - i. Air-to-Liquid Ratio Test;
 - ii. Pressure Decay Test; or
 - iii. Alternative in-use compliance tests that both are specified in the terms and conditions of the installed system's currently applicable Executive Order and are approved by the Department in program guidance issued prior to performance of the alternative tests; and
 - c. the in-use compliance tests were performed and were passed between 90 and 120 days after the date postmarked on the envelope used to submit to the Department the Installation Compliance certification required by 310 CMR 7.24(6)(c)1.

- 3. Annual In-Use Compliance Certification. Except as provided in 7.24(6)(c)4., any person subject to 310 CMR 7.24(6) shall perform in-use compliance tests pursuant to 310 CMR 7.24(6)(c)3.b. and shall annually submit to the Department a fully completed and signed In-Use Compliance Certification, on a form obtained from the Department, attesting to the following:
 - a. the installed Stage II system is operated and maintained in accordance with 310 CMR 7.24(6)(b);
 - b. the following in-use compliance tests, as applicable, were performed in accordance with 310 CMR 7.24(6)(c)6.:
 - i. <u>Vapor balance systems</u>. Annual in-use compliance test: Pressure Decay Test. Every-third-year in-use compliance test: Dynamic Pressure/Liquid Blockage Test;
 - ii. <u>Vacuum assist systems</u>. Annual in-use compliance tests: Pressure Decay Test; and Air-to-Liquid Ratio Test. Every-third-year in-use compliance test: Dynamic Pressure/Liquid Blockage Test; or
 - iii. Alternative in-use compliance tests that both are specified in the terms and conditions of the installed system's currently applicable Executive Order and are approved by the Department in program guidance issued prior to performance of the alternative tests; and
 - c. The applicable in-use compliance tests were performed and were passed not more than 30 days prior to the date postmarked on the envelope used to submit the certification to the Department.
- 4. <u>Alternative Annual In-Use Compliance Certification</u>. Any person subject to 310 CMR 7.24(6) who submits two consecutive years' Annual In-Use Compliance Certifications pursuant to 310 CMR 7.24(6)(c)3. in which all applicable in-use compliance tests were passed on the first try, as certified to in 310 CMR 7.24(6)(e)7., may elect to submit annually to the Department a fully completed and signed Alternative In-Use Compliance Certification, attesting to the following:
 - a. the installed Stage II system is correctly operated and maintained in accordance with 310 CMR 7.24(6)(b);

- b. the following in-use compliance tests, as applicable, were performed in accordance with 310 CMR 7.24(6)(c)6. (The tests must only be performed on an every other year basis with the first tests being conducted the second year following the submittal of two consecutive years' passing test results as described in 310 CMR 7.24(6)(c)3. and (6)(e)7.):
 - i. Vapor balance systems: Pressure Decay Test and Dynamic Pressure/Liquid Blockage Test.
 - ii. Vacuum assist systems: Pressure Decay Test; Air-to-Liquid Ratio Test; and Dynamic Pressure/Liquid Blockage Test; or
 - iii. Alternative in-use compliance tests that both are specified in the terms and conditions of the installed system's currently applicable Executive Order and are approved by the Department in program guidance issued prior to performance of the alternative tests; and
- c. The applicable in-use compliance tests were performed and were passed not more than 30 days prior to the date postmarked on the envelope used to submit the certification to the Department.
- d. Any person certifying pursuant to 310 CMR 7.24(6)(c)4., who fails to pass a required in-use compliance certification on the first try, as shown on the certification from submitted by the testing company pursuant to 310 CMR 7.24(6)(e)7., shall be required to certify according to the requirements of 310 CMR 7.24(6)(c)3., until such time as the person meets the requirements in 310 CMR 7.24(6)(c)4.
- 5. <u>Annual In-Use Compliance Certification Submittal Requirements</u>. The annual submittal date for certifications required pursuant to 310 CMR 7.24(6)(c)3. and 4., is no later than:
 - a. For persons subject to 310 CMR 7.24(6) who install or make a substantial modification to a Stage II system on or after January 1, 2001, the anniversary of the date postmarked on the envelope used to submit to the Department the Installation Compliance certification required by 310 CMR 7.24(6)(c)1. or the date the facility commenced operation, whichever occurs first; and

- b. For all other persons subject to 310 CMR 7.24(6), May 1, 2002, or a date otherwise provided by the Department, whichever is earlier. Persons subject to 310 CMR 7.24(6)(c)5.b. who are provided an annual submittal date by the Department shall be notified by the Department of their first annual submittal date and required in-use compliance tests pursuant to 310 CMR 7.24(6)(c)3.b. no less than 90 days prior to the first annual submittal date established by the Department.
- c. Upon request of any person subject to 310 CMR 7.24(6), the Department may revise said person's annual certification submittal date. Such revision shall set a revised annual submittal date that is no more than 12 months after the otherwise applicable submittal date.
- 6. Compliance certification tests performed to meet the requirements of 310 CMR 7.24(6)(c) shall be performed only by a person or Stage II compliance testing company that has submitted to the Department a Stage II Compliance Testing Company Notification in accordance with 310 CMR 7.24(6)(e)1.
- 7. Failure To Pass A Required In-Use Compliance Test. Any person who owns, leases, operates or controls an installed Stage II system that fails one or more in-use compliance test(s) shall repair the system so that it meets the terms and conditions of the system's currently applicable Executive Order and shall re-test and pass the said in-use compliance test(s) within 14 days of the date the Stage II system failed said test(s). If the Stage II system is not repaired and does not pass the applicable in-use compliance test(s) within those 14 days, then the person shall stop dispensing motor vehicle fuel and shall conspicuously post "Out of Order" signs on all motor vehicle fuel dispensers. Dispensing of motor vehicle fuel shall not resume until the system is repaired and passes the applicable test(s) in accordance with 310 CMR 7.24(6)(c)3.
- 8. Any certification submitted by a person subject to 310 CMR 7.24(6) pursuant to 310 CMR 7.24(6)(c) shall be signed by an individual who is a responsible official regarding the State II system, who shall attest to the following:
 - a. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe

that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment;

- b. that systems to maintain compliance are in place at the facility or, if applicable, at the location from which the tank truck is principally operated and will be maintained for the coming year even if the processes or operating procedures are changed over the course of the year; and
- c. I am fully authorized to make this attestation on behalf of this facility or tank truck, as applicable.
- 9. Any person immediately responsible for obtaining information referenced in 310 CMR 7.24(6)(c)8.a., who knowingly and willfully makes false, inaccurate, incomplete or misleading statements pursuant to any certification or notification required under 310 CMR 7.24(6), may be in violation of 310 CMR 7.24(6). Not withstanding the previous sentence, any person subject to the requirements of 310 CMR 7.24(6), shall comply with all applicable provisions of 310 CMR 7.24(6).
- 10. Any person subject to 310 CMR 7.24(6), upon written notice from the Department, shall perform such compliance tests as the Department determines necessary to demonstrate the Stage II is installed and maintained in accordance with the terms and conditions of the system's currently applicable Executive Order and shall submit the results to the Department within 14 days of the performance of said tests.

(d) Notification Requirements.

- 1. Any person, upon entering into a purchase, lease or other contractual agreement by which said person becomes the owner, operator, lessee or controller of an existing motor vehicle fuel dispensing facility or tank truck subject to 310 CMR 7.24(6) shall submit to the Department, within 30 days of the effective date of becoming such an owner, operator, lessee or controller, a fully completed Stage II Change of Owner, Operator, Lessee or Controller Notification on a form obtained from the Department.
 - a. The notification shall include the following:
 - i. the name of the new Stage II system owner, operator, lessee or controller and related business documentation, including the name and address of the facility where the

Stage II system is located or from which the tank truck is principally operated;

- ii. the date the change of owner, operator, lessee or controller occurred.
- b. Any notification shall be signed by the individual who is a responsible official for the new owner, operator, lessee or controller regarding the Stage II system, who shall attest to the following:
 - i. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment;
 - ii. I am fully authorized to make this attestation on behalf of this facility or tank truck, as applicable.
- 2. Any person subject to the requirements of 310 CMR 7.24(6) who removes an existing motor vehicle fuel dispensing facility or tank truck from service and intends to terminate that person's obligations under 310 CMR 7.24(6) regarding the facility or tank truck shall submit a fully completed and signed Stage II System Closure Certification to the Department, on a form obtained from the Department.
 - a. The closure certification shall include the following:
 - i. the name of the Stage II system owner, operator, lessee or controller and related business documentation, including the name and address of the facility where the Stage II system was located or from which the tank truck was principally operated;
 - ii. the Stage II Facility Customer Code number for the applicable facility or tank truck; and
 - iii. attestation that all motor vehicle fuel storage tanks or dispensers have been removed.

- b. Each closure certification shall be signed by an individual who is a responsible official regarding the Stage II system, who shall attest to the following:
 - i. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment;
 - ii. I am fully authorized to make this attestation on behalf of this facility or tank truck, as applicable.
- c. A motor vehicle fuel dispensing facility or tank truck subject to the requirements of 310 CMR 7.24(6), where the motor vehicle fuel storage tank(s) or dispenser(s) have been removed, is no longer subject to 310 CMR 7.24(6) as of the date postmarked on the envelope used to submit the closure certification to the Department.

(e) Compliance Testing Company Requirements.

- 1. On or after January 1, 2001, any person who owns, leases, operates or controls a company that performs Stage II compliance tests to meet the requirements of 310 CMR 7.24(6)(c) shall submit to the Department a fully completed Stage II Compliance Testing Company Notification, on a form obtained from the Department, prior to performing any required Stage II compliance test.
 - a. the notification shall include the following:
 - i. the name and business mailing address of the Stage II compliance testing company owner, operator, lessee or controller;
 - ii. the name and address of any business that is engaged in the installation or substantial modification of Stage II systems and is owned, operated, leased or controlled by, or affiliated with the owner, operator, lessee or controller of the compliance testing company;

- iii. the name and address of any motor vehicle fuel dispensing facility or tank truck subject to 310 CMR 7.24(6) that is owned, operated, leased or controlled by, or affiliated with the owner, operator, lessee or controller of the compliance testing company;
- iv. the address and telephone number of the facility(ies) from which the daily compliance testing activities of the compliance testing company originate and at which any records required by 310 CMR 7.24(6)(e)9. are maintained; and
- v. a written description of the employee training systems in place at the compliance testing company to ensure required compliance tests are performed in accordance with applicable protocols and procedures, pursuant to 310 CMR 7.24(6)(e)5. and 6.
- b. each notification shall be signed by an individual who is a responsible official regarding the compliance testing company, who shall attest to the following:
 - i. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment;
 - ii. Employee training systems are in place at the company to ensure Stage II compliance tests are performed in accordance with all applicable protocols and procedures and such training systems will be maintained for the coming year even if the protocols and procedures are changed over the course of the year; and
 - iii. I am fully authorized to make this attestation on behalf of this Stage II Compliance Testing company.
- 2. Any person subject to the requirements of 310 CMR 7.24(6)(d) shall notify the Department in writing of any change to the information

submitted to the Department pursuant to 310 CMR 7.24(6)(e)1. within 14 days of the effective date of such change. Upon the Department's written request, the person shall submit a fully revised and completed notification to the Department in accordance with the requirements of 310 CMR 7.24(6)(e)1.

- 3. No person subject to 310 CMR 7.24(6)(e) shall perform any Stage II compliance test unless said person has first been trained in accordance with the applicable compliance test protocols and procedures required pursuant to 310 CMR 7.24(6)(e)5. and 6.
- 4. Any person subject to the requirements of 310 CMR 7.24(6)(e) shall submit, at least once every two weeks, a written list to the Department identifying all motor vehicle fuel dispensing facilities and tank trucks at which the company is scheduled to perform required Stage II compliance test(s) over the next 14 day period.
 - a. The list shall be organized by Department Region and date, and shall include the name and address of each facility or tank truck to be tested, the applicable section under 310 CMR 7.24(6)(c)1., 2., 3. or 4. the required compliance tests shall be performed, and the estimated time that the company expects to arrive at the facility location.
 - b. The Department shall be notified, in writing, of any change of date of an individual facility's scheduled compliance tests no later than 9:00 A.M. of the day the scheduled test(s) is to occur. Additions to a submitted compliance testing schedule shall be submitted to the Department, in writing, no less than two working days prior to the date of any scheduled test.
 - c. Failure to comply with the notification requirements of 310 CMR 7.24(6)(e)2. may be a basis for the Department to determine that tests conducted after inadequate notice are invalid.
- 5. Any person subject to 310 CMR 7.24(6)(e) shall perform compliance tests to meet the requirements of 310 CMR 7.24(6)(c) only upon confirmation that:
 - a. all above ground Stage II system components including, but not limited to: dispensers; nozzles; swivels; hose retractors; hoses; breakaways; vapor check valves; and the pressure/vacuum valve(s) are installed as required and are the correct components in

accordance with the terms and conditions of the system's currently applicable Executive Order; and

- b. all motor vehicle fuel dispensing facilities with two or more motor vehicle fuel storage tanks are properly manifolded in accordance with the terms and conditions of the system's currently applicable Executive Order.
- 6. Any person subject to 310 CMR 7.24(6)(e) shall perform Stage II compliance tests to meet the requirements of 310 CMR 7.24(6) only in accordance with the applicable California Air Resources Board test procedures cited below, subject to the exceptions as cited:
 - a. Pressure Decay Test (TP-201.3A). The following exceptions shall be made from test procedure TP-201.3A:
 - i. pressure decay tests shall be conducted at 5.8oz/in 2 or ten inches of water column; and
 - ii. P/V relief vents shall be tested to be within .29oz/in² or 0.5 inches of water column of the designed pressure and within 1.2oz/in² or 2.0 inches of water column of the vacuum settings.
 - b. Air-to-Liquid Volume Ratio Test (TP-201.5).
 - c. Dynamic Pressure/Liquid Blockage Test (TP-201.4).
 - d. Other applicable compliance test(s) that are both approved by the California Air Resources Board and approved by the Department in program guidance issued prior to their use.
- 7. Any person subject to 310 CMR 7.24(6)(e) shall certify to the Department that each compliance test performed to meet the requirements of 310 CMR 7.24(6)(c) was performed in accordance with 310 CMR 7.24(6)(e)5. and 6. The required certification shall be submitted on the applicable Stage II Installation Certification or In-Use Compliance Certification submitted pursuant to 310 CMR 7.24(6)(c), as applicable. The required certification shall include:
 - a. the date each compliance test was first performed and the result; and

- b. the date each compliance test was performed and passed.
- 8. Each certification submitted pursuant to 310 CMR 7.24(6)(e)7. shall be fully completed and signed by an individual who is a responsible official regarding the compliance testing company, who shall attest to the following:
 - a. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment; and
 - b. I am fully authorized to make this attestation on behalf of this Stage II Compliance Testing company.
- 9. Any person subject to 310 CMR 7.24(6)(e) shall maintain the following records on site, for a minimum of five years, at the location(s) referenced on the form submitted pursuant to 310 CMR 7.24(6)(e)1.a.iv.:
 - a. A complete set of records of compliance tests performed to meet the requirements of 310 CMR 7.24(6)(c). Such records shall include, by facility address:
 - i. the date and first result for each required test performed;
 - ii. the date each test was performed and passed; and
 - iii. an itemized list of all Stage II system components reinstalled, repaired or replaced as necessary for the system to pass the applicable test(s).
 - b. A current record of all persons or employees trained in accordance with 310 CMR 7.24(6)(e)3. Such record shall include the following:
 - i. the date training was received;
 - ii. the person or employee's printed name; and

- iii. the personal signature of the person or employee acknowledging receipt of required training.
- 10. All records maintained pursuant to 310 CMR 7.24(6)(e)9. shall be made available to the Department or the US EPA immediately upon the request of either.

(f) <u>Violations of 310 CMR 7.24(6)</u>.

- 1. For any person subject to 310 CMR 7.24(6) it shall be a violation of 310 CMR 7.24(6) to:
 - a. fail to submit any certification or notification required pursuant to 310 CMR 7.24(6) as applicable;
 - b. make any false, inaccurate, incomplete or misleading statements in any certification or notification required pursuant to 310 CMR 7.24(6);
 - c. make any false, inaccurate, incomplete or misleading statements in any record, report, plan, file, log or register which said person is required to keep pursuant to 310 CMR 7.24(6);
 - d. hold themselves out as a responsible official in violation of the applicable requirements pursuant to 310 CMR 7.24(6);
 - e. fail to comply with any applicable standards imposed under 310 CMR 7.24(6); or
 - f. violate any other provision of 310 CMR 7.24(6).

(g) Department Adopted CARB Stage II System Executive Orders.

Number	Description		
G-70-7-AD	Certification of the Hasstech Model VCP-2 and VCP 2A Phase II Vapor Recovery System.		
G-70-14-AA	Recertification of Red Jacket Aspirator Assist Phase II Vapor Recovery System.		
G-70-17-AD	Modification of Certification of the Emco Wheaton Balance Phase II Vapor Recovery		
	System.		
G-70-18-C	Modification of Certification of the Shell Model 75 B1 and 75 B1-R3 Service Station Phase		
	II Vapor Recovery System.		
G-70-23-AC	Recertification of the Exxon Balance Phase II Vapor Recovery System.		
G-70-25-AA	Recertification of the Atlantic Richfield Balance Phase II Vapor Recovery System.		
G-70-33-AB	Certification of the Modified Hirt VCS-200 Vacuum Assist Phase II Vapor Recovery		
	System.		
G-70-36-AD	Modification of Certification of the OPW Balance Phase II Vapor Recovery System.		
G-70-37-B	Modification of the Certification of the Chevron Balance Phase II Vapor Recovery System		

	with OPW nozzles for Service.		
G-70-38-AB	Recertification of the Texaco Balance Phase II Vapor Recovery System.		
G-70-48-AA	Recertification of the Mobil Oil Balance Phase II Vapor Recovery System.		
G-70-49-AA	Recertification of the Union Balance Phase II Vapor Recovery System.		
G-70-52-AM	Certification of Components for Red Jacket, Hirt and Balance Phase II Vapor Recovery System.		
G-70-53-AA	Recertification of the Chevron Balance Phase II Vapor Recovery System.		
G-70-70-AC	Certification of the Healy Phase II V apor Recovery System of Service Stations.		
G-70-77	Certification of the OPW Repair/Replacement Parts and Modification of the Certification of the OPW Balance Phase II Vapor Recovery System.		
G-70-78	Certification of the E-Z Flo Nozzle Company Rebuilt Vapor Recovery Nozzles and Vapor		
C 70 101 D	Recovery Components.		
G-70-101-B	Certification of the E-Z Flo Model 3006 and 3007 Vapor Recovery Nozzles and Use of E-Z Flo Components with OPW Models 11 VC and 11 VE Vapor Recovery Nozzles.		
G-70-107	Certification of Rainbow Petroleum Products Model RA3003, RA3005, RA3006 and RA3007 Vapor Recovery Nozzles and Vapor Recovery Components.		
G-70-110	Certification of Stage I and II Vapor Recovery Systems for Methanol Fueling Facilities.		
G-70-118-AB			
G-70-125-AA			
	Nozzle.		
G-70-127	Certification of the OPW Model 111-V Phase Vapor Recovery Nozzle.		
G-70-134	Certification of the EZ Flo Rebuilt A-4000 Series and 11V-Series Vapor Recovery		
	System.		
G-70-139	Addition to the Certification of the Hirt Model VCS-200 Phase II Vapor Recovery System.		
G-70-150-AE	Modification of the Certification of the Gilbarco VaporVac Phase II Vapor Recovery		
	System.		
G-70-153-AD	Modification to the Certification of the Dresser/Wayne WayneVac Phase II Vapor		
	Recovery System.		
G-70-154-AA	Modification to the Certification of the Tokheim MaxV ac Phase II Vapor Recovery		
~	System.		
	Modification of the Certification of the Saber Nozzle for Use with the Gilbarco VaporVac Phase II Vapor Recovery System.		
	Certification of the OPW VaporEZ Phase II Vapor Recovery System.		
G-70-164-AA	Modification to the Certification of the Hasstech VCP-3A Vacuum Assist Phase II Vapor		
	Recovery System.		
G-70-165	Healy Vacuum Assist Phase II Vapor Recovery System.		
G-70-169-AA	Modification to the Certification of the Franklin Electric INTELLIVAC Phase II Vapor		
C 70 170	Recovery System.		
G-70-170	Certification of the EZ-flo Rebuilt 5005 and 5015 for use with the Balance Phase II Vapor Recovery System.		
G-70-177	Certification of the VCS400-7 Vacuum Assist Phase II Vapor Recovery System.		
G-70-179	Certification of the Catlow ICVN-V1 Vacuum Assist Phase II Vapor Recovery System.		
G-70-180	Order Revoking Certification of the Healy Phase II Vapor Recovery Systems for Gasoline Dispensing Systems.		
G-70-183	Certification of the Healy/Franklin Vacuum Assist Phase II Vapor Recovery System.		
G-70-186	Certification of the Healy Model 400 ORVR Vapor Recovery System.		
G-70-188	Certification of the Catlow ICVN V apor Recovery Nozzle System for use with the		
	Gilbarco VaporVac Vapor Recovery System.		
G-70-191	Healy/Franklin VP-1000 Vapor Pump Phase II Vapor Recovery System (Healy ORVR		
	Phase II Vapor Recovery System).		

(h) The provisions and requirements of 310 CMR 7.24(6)(a) and (b) are subject to the enforcement provisions specified in 310 CMR 7.52.

(7) Oxygenated Gasoline Composition and Use.

(a) Applicability.

- 1. 310 CMR 7.24(7) applies to any person who owns, leases, operates, or controls one or more of the following in the Commonwealth of Massachusetts as defined in 310 CMR 7.00:
 - a. Bulk plants;
 - b. Bulk terminals;
 - c. Tank trucks subject to 310 CMR 7.24(4);
 - d. Gasoline marketing facilities; or
 - e. Motor vehicle fuel dispensing facilities.
- 2. Effective November 1, no person subject to 310 CMR 7.24(7)(a)1. shall provide, offer for sale, use, sell, or exchange in trade any gasoline in the oxygenated gasoline control area, during the oxygenated gasoline control period, which is not oxygenated gasoline, except where an emergency exemption has been issued by the Department pursuant to 310 CMR 7.24(7)(g).
- 3. Such limitations shall not apply to the offer, provision, sale, or exchange of gasoline not meeting the requirements of 310 CMR 7.24(7)(a)2. by subject bulk plants, bulk terminals, or tank trucks during the oxygenated gasoline control period to gasoline marketing facilities or motor vehicle fuel dispensing facilities located outside the oxygenated gasoline control area.

(b) Compliance Testing.

- 1. Any person who owns, leases, operates, or controls a bulk plant or bulk terminal subject to this regulation shall conduct gasoline testing for the purposes of compliance with the requirements of 310 CMR 7.24(7). Such compliance testing shall include but not be limited to:
 - a. determination of the oxygenate content by weight of gasoline;

- b. the percent oxygen content by weight; and
- c. the oxygenate type(s) utilized to satisfy the requirements of this regulation.
- 2. Bulk plants and bulk terminals subject to this regulation which receive oxygenated gasoline such that no additional blending of oxygenates occurs for the purpose of compliance with this regulation, shall conduct compliance testing upon receipt of each delivery of such oxygenated gasoline.
- 3. Bulk plants and bulk terminals subject to this regulation which blend oxygenates with gasoline for the purpose of compliance with this regulation, shall conduct compliance testing upon the transfer of every one million (1,000,000) gallons of oxygenated gasoline from said bulk plant or bulk terminal to subject tank trucks, or more frequently if so required by the Department.

(c) Methods for Sampling, Testing, and Calculating Oxygen Content.

- 1. Any person determining the oxygen content by weight of gasoline shall use the values listed in Table 7.24(7)(c)1., and the methods identified in 310 CMR 7.24(7)(c)2., 3., and 4. All volume measurements shall be adjusted to sixty (60) degrees fahrenheit.
- 2. Any person determining the oxygen content by weight of gasoline shall obtain a representative sample in accordance with the US Environmental Protection Agency's (EPA) sampling method as detailed in Title 40 CFR Part 80, Appendix D or any other sampling method approved by the Department and EPA.
- 3. Any person determining the oxygen content by weight of gasoline shall determine the mass concentration of each oxygenate in the sample by one of the following methods:
 - a. ASTM Method 4815 (Standard Test Method For Determination of C1 to C4 Alcohols and MTBE in Gasoline by Gas Chromatography); or
 - b. Appendix C to EPA's Notice of Guidelines for Oxygenated Gasoline Credit Programs as amended; or
 - c. Any other method approved by the Department and EPA.

4. Any person determining the oxygen content by weight of gasoline shall use the oxygen content conversion methodology contained in EPA's Notice of Guidelines for Oxygenated Gasoline Credit Programs as amended.

TABLE 7.24(7)(c) - 1 SPECIFIC GRAVITY AND WEIGHT FRACTION OXYGEN OF COMMON OXYGENATES

Oxygenate	Weight Fraction Oxygen	Specific Gravity
Methyl alcohol	0.4993	0.7963
Ethyl alcohol	0.3473	0.7939
Normal propyl alcohol	0.2662	0.8080
Isopropyl alcohol	0.2662	0.7899
Normal butyl alcohol	0.2158	0.8137
Isobutyl alcohol	0.2158	0.8058
Secondary butyl alcohol	0.2158	0.8114
Tertiary butyl alcohol	0.2158	0.7922
Methyl tertiary butyl ether (MTBE)	0.1815	0.7460
Tertiary amyl methyl ether (TAME)	0.1566	0.7752
Ethyl tertiary butyl ether (ETBE)	0.1566	0.7452
Di-isopropyl ether (DIPE)	0.1566	0.7300

(d) Record Keeping.

1. All records and documentation maintained in compliance with 310 CMR 7.24(7)(d)2., 3., and 4. shall be retained on site, or, upon the written agreement from the Department, in a centralized location, for not less than two (2) calendar years, and shall be made available for review upon request of the Department.

- 2. Any person who owns, leases, operates, or controls a bulk plant or bulk terminal subject to this regulation shall maintain records containing the following information:
 - a. Results of all compliance testing, including the test method and sampling procedure, and the name and address of the person performing such testing.
 - b. All transfer documents specified in 310 CMR 7.24(7)(e)1.
- 3. Any person who owns, leases, operates, or controls a tank truck subject to this regulation shall maintain records containing the following information:
 - a. All transfer documents specified in 310 CMR 7.24(7)(e)1.
 - b. All transfer documents specified in 310 CMR 7.24(7)(e)2.
- 4. Any person who owns, leases, operates, or controls a gasoline marketing facility or motor vehicle fuel dispensing facility subject to this regulation shall maintain records containing the following information:

All transfer documents specified in 310 CMR 7.24(7)(e)2.

(e) Transfer Documents.

- 1. Any person who owns, leases, operates, or controls a bulk plant or bulk terminal subject to this regulation shall provide a transfer document for the purposes of documenting each transfer of oxygenated gasoline from said plant or terminal to a subject tank truck. Said transfer document may consist of an invoice, bill of lading, shipping paper or other documentation, and shall include, but need not be limited to, the following information:
 - a. a statement that the oxygenated gasoline transferred complies with the requirements of 310 CMR 7.24(7)(a)2.;
 - b. the date and quantity of oxygenated gasoline transferred;
 - c. the name and address of the person owning, leasing, operating, or controlling said bulk plant or bulk terminal from which oxygenated gasoline is transferred; and

- d. The name and address of the person owning, leasing, operating, or controlling said tank truck to which oxygenated gasoline is transferred.
- 2. Any person who owns, leases, operates, or controls a tank truck subject to this regulation shall provide a transfer document for the purposes of documenting each transfer of oxygenated gasoline from said tank truck to a subject gasoline marketing facility or motor vehicle fuel dispensing facility. Said transfer document may consist of an invoice, bill of lading or other documentation, and shall include, but need not be limited to, the following information:
 - a. a statement that the oxygenated gasoline transferred complies with the requirements of 310 CMR 7.24(7)(a)2.;
 - b. the date and quantity of oxygenated gasoline transferred;
 - c. the name and address of the person owning, leasing, operating, or controlling said tank truck from which oxygenated gasoline is transferred; and
 - d. The name and address of the person owning, leasing, operating, or controlling said gasoline marketing facility or motor vehicle fuel dispensing facility to which oxygenated gasoline is transferred.

(f) Dispenser Labeling.

- 1. Each gasoline marketing facility or motor vehicle fuel dispensing facility subject to 310 CMR 7.24(7)(f) shall permanently affix a label to each gasoline dispensing device as specified in 310 CMR 7.24(7)(f)2. below.
- 2. The label shall state the following:

"From November 1 through the last day of February, the gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles."

- 3. Any label required pursuant to this section shall be:
 - a. Posted on the upper two-thirds, of the pump or dispenser unit face which depicts the volume and cost of gasoline dispensed, such

that the label is clear, conspicuous, and easily readable to a driver in the vehicle to which gasoline may be dispensed; and

- b. Is clearly legible and in block letters that are:
 - i. No less than 20-point bold type; and
 - ii. In a color that contrasts with the background on which they are placed.

(g) Emergency Exemption.

- 1. In extreme and unusual circumstances, such as a natural disaster or other event outside of the control of the applicant, such that the applicant has an insufficient supply of oxygenated gasoline, and which could not have been avoided by the exercise of prudence, diligence, and due care the Department may approve an application for an emergency exemption if the applicant demonstrates, in writing, to the Department's satisfaction that:
 - a. the emergency exemption is in the public interest;
 - b. the applicant has exercised prudent planning and was not able to avoid the insufficient supply of oxygenated gasoline and has taken all reasonable steps to minimize the extent of the insufficient supply of oxygenated gasoline;
 - c. the applicant can show how the requirements for oxygenated gasoline will be expeditiously met; and
 - d. the applicant will not incur a financial gain from the granting of such an emergency exemption.
- 2. The Department may elect to hold a public hearing on any request for an emergency exemption.
- 3. No person who applies, in writing, for an emergency exemption shall provide, offer for sale, sell, or exchange in trade any gasoline other than oxygenated gasoline during the oxygenated gasoline control period in the oxygenated gasoline control area without the written approval of the Department.
- 4. An emergency exemption issued by the Department shall not exceed thirty (30) days. Said exemption may be renewed by the Department upon

written demonstration of need, consistent with the requirements of 310 CMR 7.24(7)(g).

- 5. Any person to whom the Department has issued an emergency exemption shall:
 - a. Only provide, offer for sale, sell, or exchange in trade gasoline with an oxygen content of at least two percent (2%) by weight during the oxygenated gasoline control period;
 - b. Maintain records required by 310 CMR 7.24(7)(d)1. above documenting the quantity of gasoline sold or transferred each day; and
 - c. Within thirty (30) days of the end of the emergency exemption, submit a report to the Department in writing summarizing the information contained in such records.
- (h) The provisions of 310 CMR 7.24(7) may be enforced pursuant to 310 CMR 7.52.
- (8) Marine Volatile Organic Liquid Transfer.
 - (a) <u>Applicability</u>. 310 CMR 7.24(8) applies to any person who owns, leases, operates, or controls a marine terminal or marine tank vessel which:
 - 1. takes part in a loading event which transfers an organic liquid, or in which any liquid is transferred into a marine vessel cargo tank which previously held an organic liquid; or,
 - 2. which performs ballasting or cleaning operations on a cargo tank which previously held organic liquid while the vessel is moored at a dock or other permanent stationary structure. The provisions of 310 CMR 7.24(8) do not apply to lightering operations.
 - (b) Reasonably Available Control Technology (RACT) Requirements. On or after May 31, 1995 no person subject to 310 CMR 7.24(8) shall cause, suffer, allow, or permit emissions of volatile organic compounds in excess of the emissions limitations and standards set forth in 310 CMR 7.24(8)(c) through (e).
 - (c) RACT Emissions Limitations.

- 1. No person subject to 310 CMR 7.24(8) shall cause, suffer, allow, or permit a loading event while docked at a marine terminal unless:
 - a. marine tank vessel emissions of volatile organic compounds are limited to two lbs per 1,000 bbls of organic liquid transferred (5.7 grams per cubic meter); or,
 - b. marine tank vessel emissions of volatile organic compounds are processed by equipment satisfying 310 CMR 7.24(8)(d), and reduced by at least 95% by weight as compared to uncontrolled conditions when using a recovery device, or by at least 98% by weight as compared to uncontrolled conditions when using a combustion device; and,
 - c. the organic material storage tanks at the marine terminal to be used during the loading event meet the requirements of 310 CMR 7.24(1).
- 2. Marine tank vessel emissions resulting from ballasting or cleaning of cargo tanks are subject to the emissions limitations of 310 CMR 7.24(8)(c)1. only if emissions capture and control equipment is installed at the marine terminal.
- (d) <u>Emissions Capture and Control Equipment Requirements</u>. Any emissions capture and control equipment used to comply with 310 CMR 7.24(8)(c) shall be designed and operated to collect and control volatile organic compound emissions from the loading of organic liquids into marine tank vessels or from ballasting and cleaning cargo tanks which previously held an organic liquid.
- (e) Equipment Performance Standards.
 - 1. No person subject to 310 CMR 7.24(8) shall cause, suffer, allow, or permit a loading event unless the marine tank vessel is vapor tight or the tank vessel is loaded at less than atmospheric pressure.
 - 2. Marine tank vessels shall be demonstrated to be vapor tight by one of the following:
 - a. present a copy of the vapor-tightness pressure test documentation for the marine tank vessel prior to loading. The date listed on the documentation must be within the 12 months preceding the date of demonstration, and the test must be

conducted in accordance with the procedures specified in Section 63.565(c)(1) of 40 CFR Part 63, Subpart Y; or

- b. present a copy of the vapor-tightness leak test documentation for the marine tank vessel prior to loading. The date listed on the documentation must be within the 12 months preceding the date of demonstration, and the test must be conducted in accordance with the procedures in Method 21 of 40 CFR Part 60 Appendix A; or
- c. perform a leak test during the loading event in accordance with the procedures in Method 21 of 40 CFR Part 60 Appendix A.
- (f) <u>Plan Submittal Requirements</u>. Any person subject to 310 CMR 7.24(8) must submit an emission control plan for approval by the Department which satisfies the requirements of 310 CMR 7.18(20)(c). This provision does not apply to any person who is subject to 310 CMR 7.24(8), and who has received written approval from the Department under 310 CMR 7.02, 310 CMR 7.18(17), or 310 CMR 7.18(20) for emission capture and control equipment which satisfies the requirements of 310 CMR 7.24(8).
- (g) Recordkeeping Requirements. Any person subject to 310 CMR 7.24(8) shall prepare and maintain records regarding each loading event sufficient to demonstrate compliance with 310 CMR 7.24(8)(c) through (e). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the Department or EPA. Such records shall include, but are not limited to:
 - 1. The name and location of the marine terminal at which the loading event occurred.
 - 2. The company responsible for the operation of the marine terminal.
 - 3. The date(s) and times at which the marine tank vessel arrived and departed from the marine terminal.
 - 4. The name, registry, and owner of the marine tank vessel.
 - 5. The prior cargo carried by the marine tank vessel.
 - 6. The type and amount of organic liquid loaded into the tank vessel.
 - 7. The condition of the tanks prior to being loaded (e.g., cleaned, gas freed, etc).

- 8. Description of the operating procedure used to control emissions while ballasting into unsegregated ballast tanks (associated with unloading or other events).
- 9. Any testing performed during loading.
- 10. Any leaks detected and the repair action taken.

(h) Testing Requirements.

- 1. Any person subject to 310 CMR 7.24(8) who owns or operates a marine terminal shall, upon startup of the emission control equipment, conduct initial performance tests to demonstrate compliance with 310 CMR 7.24(8). Testing shall be conducted in accordance with EPA Method 21 and Method 25 as described in CFR Title 40 Part 60, or by other methods approved by the Department and EPA.
- (i) <u>Monitoring Requirements</u>. Any person subject to 310 CMR 7.24(8) who installs and operates emission control equipment to meet the emission limitations in 310 CMR 7.24(8)(c) must monitor the emission control equipment in accordance with the procedures specified in Sections 63.564(e) through (j) of 40 CFR 63 Subpart Y.